

CLAIMS

What is claimed is:

1. A chip card comprising:

a chip card body having a first cavity and a second cavity, the second cavity being recessed into a base of the first cavity, so that the first cavity extends laterally beyond the second cavity and a base surface of the first cavity surrounds the second cavity;

a carrier substrate secured to the chip card body and arranged in the first cavity and having an upper surface contact for reading the chip card on its top side and a lower surface contact on its underside, which are electrically connected to one another by contact-hole lines, which run through the carrier substrate, the contact-hole lines passing through both the lower surface contacts and the upper surface contacts and being arranged in a region of the first cavity which extends laterally outside the second cavity, and the contact-hole lines being covered at the base of the first cavity;

a semiconductor chip connected to the lower surface contacts of the carrier substrate by electrical connections; and

a bonding layer, which extends from the base of the first cavity into an interior of the second cavity and covers a region of the semiconductor chip, securing the carrier substrate, on its underside, to the base surface of the first cavity.

2. The chip card of Claim 1, wherein the bonding layer surrounds the semiconductor chip in the second cavity from below.

3. The chip card of Claim 1, further comprising an electrically insulating or anisotropic conductive paste covering the semiconductor chip in a region of the electrical connections to the lower surface contacts of the carrier substrate, and not covering a region of the semiconductor chip which is not covered by the paste.

4. The chip card of Claim 1, wherein the bonding layer covers the contact-hole lines.

5. The chip card of Claim 1, further comprising recesses formed by the bonding layer and surrounding the contact-hole lines, wherein the bonding layer surrounds and seals spaces formed by the recesses.

6. The chip card of Claim 1, wherein the lower surface contact of the carrier substrate extends beyond an inner edge of a base surface of the first cavity and above the semiconductor chip within the second cavity.

7. The chip card of Claim 1, wherein the semiconductor chip is bonded to the lower surface contacts of the carrier substrate using a flip-chip method.

8. The chip card of Claim 1, wherein the bonding layer is formed from a material which only becomes adhesive at an elevated temperature.

9. The chip card of Claim 1, wherein the bonding layer is formed from a cured liquid adhesive.

10. The chip card of Claim 9, wherein the bonding layer is formed from cured cyanoacrylate.

11. The chip card of Claim 1, wherein the chip card is a mobile radio card.

12. A chip card comprising:

a chip card body having a first cavity and a second cavity, the second cavity being recessed into a base of the first cavity, so that the first cavity extends laterally beyond the second cavity and a base surface of the first cavity surrounds the second cavity;

a semiconductor chip provided in the second cavity;

a carrier substrate provided in the first cavity and having upper and lower surface contacts;

a contact-hole line electrically connecting the upper and lower surface contacts of the carrier substrate and arranged in a region of the first cavity which extends laterally outside the second cavity; and

a bonding layer extending from the base of the first cavity into an interior of the second cavity, closing a lower end of the contact-hole line, and covering a region of the semiconductor chip.

13. The chip card of Claim 12, wherein the bonding layer surrounds the semiconductor chip in the second cavity from below.

14. The chip card of Claim 12, further comprising a recess formed by the bonding layer and surrounding the contact-hole line, wherein the bonding layer surrounds and seals a space formed by the recess.

15. The chip card of Claim 12, wherein the lower surface contact of the carrier substrate extends beyond an inner edge of a base surface of the first cavity and above the semiconductor chip within the second cavity.

16. The chip card of Claim 12, wherein the semiconductor chip is bonded to the lower surface contact of the carrier substrate using a flip-chip method.

17. The chip card of Claim 12, wherein the bonding layer is formed from a material which only becomes adhesive at an elevated temperature.

18. The chip card of Claim 12, wherein the bonding layer is formed from a cured liquid adhesive.

19. The chip card of Claim 18, wherein the bonding layer is formed from cured cyanoacrylate.

20. The chip card of Claim 12, wherein the chip card is a mobile radio card.